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MONTANA

STATE BOARD OF AGRICULTURE

RULES AND REGULATIONS

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Rules and Regulations

OF THE

MONTANA

STATE BOARD OF HORTICULTURE

As Amended September 1st, 1899.

In Effect October 1st, 1899.

Formulas and Remedies

FOR

Fruit Pests.

Issued by the Montana State Board of Horticulture

September 1, 1899.

SB21
M74

Officers and Members of the Board.

I. D. O'Donnell, President, First District, Billings.

S. M. Emery, Second District, Bozeman.

Paris Gibson, Third District, Great Falls.

D. E. Bandmann, Fourth District, Missoula.

J. H. Edwards, Fifth District, Kalipell.

Hon. R. B. Smith, Ex-Officio Member, Helena.

C. H. Edwards, Secretary, Missoula.

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Inspectors.

I. D. O'Donnell, First District, Billings, Yellowstone Co.

Prof. R. A. Cooley, Second District and Inspector at Large for the State, Bozeman, Gallatin Co.

C. H. Campbell, Third District, Great Falls, Cascade Co.

W. B. Harlan, Fourth District, Como, Ravalli Co.

J. H. Edwards, Fifth District, Kalispell, Flathead Co.

W K. Semple, Resident Fruit Inspector, Butte, Silver Bow Co.

AN ACT

To Create the Montana State Board of Horticulture, to Prescribe its Powers and Duties, and to Appropriate Money Therefor.

Be it enacted by the Legislative Assembly of the State of Montana:

Section 1. There is hereby created a State Board of Horticulture, to consist of six (6) members, five of whom shall be appointed by the Governor, one from each of the horticultural districts that are hereby created, and the State Executive, who shall be an ex-officio member of the board. No person shall, however, be appointed on said Board, or employed by them, who shall be connected in any way, with any nursery, or who shall be engaged in the sale or handling for profit of any nursery product.

Section 2. The State shall be divided into the following horticultural districts: The first district shall comprise the counties of Dawson, Custer, Yellowstone, Sweet Grass, Carbon and Park; the second district shall comprise the counties of Gallatin, Madison, Jefferson, Beaverhead, Silver Bow, Lewis and Clarke, Meagher and Broadwater; the third district shall comprise the counties of Cascade, Fergus, Valley, Choteau and Teton; the fourth district shall comprise the counties of Missoula, Ravalli, Granite and Deer Lodge; the fifth district shall comprise the county of Flathead.

Section 3. The members shall reside in the district for which they are appointed. They shall be selected with reference to their study of, and practical experience in horticulture, and the industries dependent thereon. They shall hold office for a term of four years, and until their successors are appointed and qualified; provided, however, that two of the Board first appointed—to be determined by lot—shall retire at the expiration of two years. All vacancies in the Board shall be filled by appointment of the Governor, and shall be for the unexpired term.

Section 4. The Board is authorized to employ a secretary, and prescribe his duties, who shall hold his appointment at the pleasure of the Board. Before entering upon the discharge of his duties, each member and employe of the Board shall take and subscribe to the oath of office, which said oath shall be filed with the Secretary of State.

Section 5. The Board may call together and hold, in conjunction with horticultural societies, public meetings of those interested in horticulture and kindred pursuits, and may publish and distribute such proceedings and discussions as in its judgment may seem proper, provided the sum so expended shall not exceed the sum of $300 per annum.

The Board shall meet on the third Monday of February and September

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of each year, and as much oftener as it may deem expedient.

Section 6. The office of the Board shall be located at such place as the majority thereof may determine, and shall be in charge of the Secretary during the absence of the Board.

Section 7. For the purpose of preventing the spread of contagious diseases among fruit and fruit trees, and for the prevention, treatment, cure and extirpation of fruit pests and the diseases of fruits and fruit trees and for the disinfection of grafts, scions, or orchard debris, empty fruit boxes or packages, and other suspected material or transportable articles dangerous to orchards, fruits and fruit trees, said Board may prescribe regulations for the inspection and disinfection thereof, which regulations shall be circulated in printed form, by the Board, among the fruit growers and fruit dealers of the State, and shall be published at least ten days in two horticultural papers of general circulation in the State, and shall be posted in three conspicuous places in each county in the State, one of which shall be at the county court house thereof.

Section 8. The said Board shall elect from their own number or appoint from without their number, to hold office at the pleasure of the Board, one competent person in each district, to be known and to act as "Inspector of Fruit Pests." Said inspectors shall be selected with reference to their study and practical experience in horticulture. It shall be the duty of said inspectors to visit the nurseries, orchards, stores, packing houses, warehouses and other places where horticultural products and fruits are kept or handled within their respective districts, and to see that the regulations of the State Board of Horticulture to prevent the spread of fruit pests and diseases of trees and plants, and the disinfection of fruits, trees, plants, grafts, scions, orchard debris and empty fruit boxes and other material shall be fully carried out and complied with. Said inspectors shall have free access, at all times, to all the premises where any trees, plants,fruits or horticultural products or supplies are kept or handled, and shall have full power to enforce the rules and regulations of the State Horticultural Board, and to order the destruction or disinfection of any or all trees, plants, fruits or horticultural products or supplies found to be infected with any disease, as prescribed or designated by said Board.

Section 9. It shall be the duty of every person or persons, corporation or corporations, who shall sell or deliver to any person or persons, corporation or corporations, any trees, plants, vines, scions or grafts, to notify the inspector of said district wherein such trees, plants, vines, etc., etc., are to be delivered, at least five days before said goods are to be delivered, giving the date and nursery or railroad station where said trees, plants, scions, etc., etc., are to be delivered, together with the name of the party or parties who are to receive the same. It shall be the duty of the inspector receiving said notice to inspect the said trees, plants, grafts, scions, etc., etc., as soon thereafter as practicable, and at the point where the same are to be delivered, and if the same be found free from

any and all diseases or pests, as designated by said State Board of Horticulture,he shall so certify and shall attach such certificate to each lot or bill of such trees, plants, scions, grafts, etc., etc., which said certificate must contain a list of the said trees, grafts, scions, plants or vines so inspected. But if any of the trees, grafts, scions, vines or plants so inspected shall be found to be diseased or infested with any of the pests, as prescribed by said Board, then the inspector shall order the destruction of such trees, grafts, scions, vines, etc., etc., so diseased or infested, together with all boxes,wrapping or packing pertaining thereto.

Section 10. If any person or persons in charge or control of any nursery, orchard, storeroom, packing house or other place where horticultural products or supplies are handled or kept, shall fail or refuse to comply with the rules and regulations of the said State Board of Horticulture, or shall fail or refuse to disinfect or destroy any diseased or infected trees, plants, vines, scions, grafts, shrubs or other horticultural supplies or products, when ordered so to do, by the inspector of such district, he shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in any sum not less than $25 nor more than $300.

Section 11. It shall be the duty of every owner or manager of every orchard, nursery, storeroom, packing house or other place where horticultural products or supplies are kept or handled, which shall become diseased or infected with any injurious insect or pest, to immediately, upon discovery of the existence of such disease or pest, to notify the inspector of said district of the existence of the same. It shall be the duty of such owner or manager, at his own proper expense, to comply with and carry out all the instructions of said inspector for the eradication of said disease or pests. Any person who shall fail or refuse to notify said inspector, as herein provided, or who shall fail or refuse to comply with the instructions of said inspector for the eradication of any disease or pest, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than $25 nor more than $300.

Section 12. If any person or persons, corporation or corporations, shall fail or refuse to forthwith comply with the instructions of said inspector, for the eradication of any disease or pest, said inspector shall proceed forthwith to eradicate such disease or pest and the expense of the same shall become a charge and a lien upon the property of such owner.

Section 13. Every person who, for himself or as agent for any other person or persons, corporation or corporations, transportation company or common carrier, shall deliver or turn over to any person or persons, corporation or corporations, any trees, vines, shrubs, nursery stock, scions, grafts, without first having attached the inspector's certificate, as provided in Section 9 of this Act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in a sum not less than $25 nor more than $300.

Section 14. No person or persons, corporation or corporations, shall be liable to any other person or persons, corporation or corporations for

any damage to any trees, vines or shrubs, nursery stock, scions or grafts by reason of the same being held to await the certificate of the inspector, as provided in Section 9 of this Act.

Section 15. The inspectors of fruit pests appointed or elected by said Board, shall receive as compensation for their services the sum of $5.00 (five dollars) per day for the time actually employed; provided, however, that no inspector shall receive more than three hundred dollars in any one year, when acting as such inspectors of fruit pests. The members of said Board shall receive no compensation for their services, except actual expenses paid out. The secretary of said Board shall receive the sum of $1,000 per annum for his services.

Section 16. All bills for expenditures, under this Act, shall be audited and passed upon by said Board of Horticulture, and if found legal and just, shall be allowed, subject to the approval of the State Board of Examiners, and a warrant shall be drawn therefor upon the auditor of the State of Montana, who shall draw his warrant upon the State Treasurer therefor.

Section 17. It shall be the duty of the Secretary to attend all meetings of the Board and to procure records of the proceedings and correspondence, to collect books, pamphlets, periodicals and other documents containing valuable information relating to horticulture, and to preserve the same; to collect statistics and other information showing the actual condition and progress of horticulture in this State and elsewhere; to correspond with agricultural and horticultural societies, colleges and schools of agriculture and horticulture, and other persons and bodies as may be directed by the Board, and prepare, as required by the Board, reports for publication; he shall also act as assistant to, and obey the directions of the inspectors of fruit pests, under the directions of the Board.

Section 18. The Board shall biennially, in the month of January, report to the Legislature a statement of its doings and abstracts of the reports of the inspectors of fruit pests, and of the Secretary.

Section 19. There is hereby appropriated for the use of the State Board of Horticulture, as set forth in this Act, out of the moneys in the state treasury not otherwise appropriated, the sum of three thousand dollars ($3,000), or as much thereof as may be necessary for the year commencing March 1, 1899, three thousand six hundred dollars ($3,600), or as much thereof as may be necessary, for the year commencing March 1, 1900.

Section 20. All sums of moneys collected as fines for violations of any of the provisions of this Act shall be turned into the state treasury for use in defraying the expenses of the Board hereby created, and the appropriations hereby made shall be paid out of the fund to the extent of the money therein contained.

NURSERY STOCK.

The term nursery stock under the law, is construed to mean and include, fruit, shade and ornamental trees (deciduous or evergreen), shrubs, vines, plants, roots, bulbs, buds, scions, cuttings, or other portions of plants, shrubs or trees designed to be replanted in Montana for home or commercial use.

Rules and Regulations of the State Board of Horticulture.

For the purpose of preventing the importation and spread of contagious diseases among fruit, fruit trees and nursery stock and for the treatment, cure and extirpation of fruit pests, the Montana State Board of Horticulture, establish, (in accordance with an Act to Create the Montana State Board of Horticulture, to prescribe its powers and duties, approved February, 1899), the following rules and regulations and ask the earnest co-operation of all fruit growers, dealers and all persons interested in maintaining the present high grade of Montana fruit, in carrying out the important work.

Rule 1. The Inspector at Large for the State of Montana shall inspect and fumigate all nursery stock, trees, plants, vines and cuttings grown or growing within the State of Montana, and shall have authority to order all nursery stock, trees, plants, vines and cuttings, used for filling orders, to be disinfected by fumigation or other method, when in his judgment such is necessary. After such inspection, if it be found that said nursery stock, trees, plants, vines and cuttings, are clean and free from insects and fungi pests, he shall issue his certificate to said nurseryman, and said certificate shall entitle him to use said stock, so inspected and disinfected, for filling nursery orders for the next current delivery.

Rule 2. All nursery stock, trees, plants, vines and cuttings of any kind shipped into or brought into the State of Montana, before delivery to the purchaser shall be unpacked from boxes, and in the case of baled and burlaped shipments these coverings shall be removed and the stock fumigated as hereinafter provided, as follows:

All such nursery stock, trees, plants, vines and cuttings transported over the Northern Pacific Railway, from the west, shall be inspected and fumigated at the city of Missoula.

All such nursery stock, trees, vines, plants and cuttings, transported over the Oregon Short Line, from the South, shall be inspected and treated at Dillon.

All nursery stock, trees, plants, vines and cuttings transported over the Northern Pacific Railway from the east, or over the Burlington Railway, shall be inspected and treated at Miles City or Billings.

All such nursery stock, trees, plants, vines and cuttings, transported from the west over the Great Northern Railway, shall be inspected and treated at Kalispell.

All such nursery stock, trees, plants, vines and cuttings, transported from the north over the Great Falls and Canada Railway, and from the east over the Great Northern Railway, shall be inspected and treated either at Glasgow, Chinook, Fort Benton or Great Falls.

All such nursery stock, trees, plants, vines and cuttings, brought into the State of Montana by wagon shall be inspected and treated at the nearest quarantine station, as hereinafter mentioned, to the point where such nursery stock, trees, plants, vines and cuttings enter the State.

The said cities of Billings, Miles City, Dillon, Missoula, Kalispell, Great Falls, Fort Benton, Chinook and Glasgow are hereby designated as quarantine stations, where all nursery stock, trees, plants, vines and cuttings shall be inspected and fumigated, except as otherwise provided for in these rules and regulations.

The certificate of the Inspector making such examination and inspection shall exonerate the shipper and consignee from any and all penalties provided by law.

Rule 3. Importers or owners of nursery stock, trees, plants, vines and cuttings who shall desire to have such nursery stock, trees, plants, vines and cuttings, inspected and fumigated at points in Montana, other than the regular quarantine stations, may have such inspection and fumigation made at any point designated by such importer or owner; provided, however, that such importer or owner shall pay all charges of inspection and fumigation, and all expenses of the officer employed in such inspection and fumigation, such charges and expenses to be paid before a certificate is granted.

Rule 4. All boxes, packages, wrapping and packing used in the importation of fruits, nursery stock, trees, plants, vines and cuttings into the State of Montana shall be destroyed by burning the same as soon as emptied of their contents.

Rule 5. It shall be unlawful for the owner or importer of any nursery stock, trees, plants, vines and cuttings to allow any of the debris of such nursery stock, trees, plants, vines and cuttings to accumulate or to become a menace to the fruit industry; and the destruction of all such debris is hereby ordered, and the inspector of each district will see that all such debris is destroyed by burning.

Rule 6. The Inspector of each district shall inspect or cause to be inspected, each and every orchard within his district annually. He shall see that the owner or owners of any premises where trees, plants, vines, etc., are growing shall obey the instructions of the State Board.

Rule 7. It shall be unlawful for any person to spray any tree, plant, vine or shrub when the same is in bloom, with any substance injurious to bees or honey.

Rule 8. In the absence of the Inspector of any district or in the event that he cannot perform, for any reason, the work required, the member of the State Board of Horticulture for said district may appoint temporarily, such assistant inspectors as may be necessary for such work.

Rule 9. All Inspectors shall, at the close of each month, report to the Secretary of the Board a complete statement of his doings, upon the proper blanks furnished for that purpose, together with an itemized bill for his labor for the time actually served by him during such month, which bill, when properly audited by the member of the State Board of Horticulture for the district in which said Inspector shall labor, which bill will be again audited by the President and Secretary of the State Board and forwarded to the State Board of Examiners for payment.

Rule 10. Inspectors shall receive as compensation the sum of five dollars for each and every day actually served, but such Inspector shall pay his own expenses.

Rule 11. All inspection and fumigation shall be under the charge and supervision of the Inspector at Large, and all Inspectors shall be responsible to him.

Rule 12. The Inspectors appointed by this Board are authorized to inspect any and all nursery stock, trees, plants, shrubs, vines, or the products thereof, and to collect the fees prescribed in these rules and regulations, from the owner or person in control of such nursery stock or products, wherever found.

Rule 13. For the inspection or treatment of each and every carload of nursery stock, a fee of $10 shall be charged to cover expense of inspection and fumigation.

Rule 14. It is hereby ordered that all green fruits and all citrus fruits found for sale in Montana, shall be inspected and if found to be free of any disease or infection, shall be branded "Inspected and Passed," but if found to be infected with injurious insects or disease, shall be condemned and destroyed by burning.

Rule 15. For the inspection of all green fruits and citrus fruits, a fee of two (2) cents per box or package, with a maximum charge of $5 for each separate lot inspected.

Rule 16. All fines and fees collected for inspection and fumigation shall be turned over by Inspectors to the Secretary of the Board, who shall pay the same to the State Treasurer.

By fumigation is to be understood treatment with hydrocyanic acid gas. This treatment should be done as follows: All nursery stock to be treated should be placed in an air-tight tent or box. For every 100 cubic feet of space in box or tent, take one ounce (avoirdupois weight), of fused potassium cyanide, 98 per cent strength, preferably in lumps about the size of a walnut; one and one-half ounces commercial sulphuric acid, best grade; and two and one-fourth fluid ounces of water. First place the water in a three-gallon vessel (which may be of glazed earthenware); to this add the acid and finally the potassium cyanide. (The cyanide would better be enclosed in a small paper bag in which a hole is torn). Immediately close the doors or openings, taking all precautions against inhaling the gas, which is one of the most violent poisons known. After leaving box or tent closed for 40 minutes, open all doors and allow at least one hour

for thorough ventilation before attempting to remove stock. No injury is caused to nursery stock if the gas is left in more than 40 minutes.

List of insects and fungi to guard against:

San Jose Scale.
Oyster Shell Bark Louse.
Wooly Aphis.
Codlin Moth.
Flathead Apple Tree Borer.
Blister Mite of the Pear.

Fungi:

Apple Rust.
Black Knot of Plums.
Twig Blight of the Pear.
Leaf Blight of the Apple.

DIP FOR NURSERY STOCK AND WINTER SPRAY FOR SCALE INSECTS.

Place 10 pounds of lime and 20 pounds of sulphur in a boiler with 20 gallons of water and boil briskly for two hours, then put 20 pounds of lime in a cask and slack it with water. Add 15 pounds of coarse salt; when dissolved add this to the lime and sulphur and boil half an hour longer. Apply lukewarm.

SUMMER SPRAY FOR GREEN APHIS.

Quassia Chips ..... 8 pounds.
Whale Oil Soap ..... 7 pounds.
Water ..... 100 gallons.

Boil the quassia chips in water for one hour. Dissolve the soap in hot water, strain both and mix together. Add enough water to make 100 gallons. This remedy is to be used with a spray pump with good force. It does not injure the foliage.

BORDEAUX MIXTURE FOR FUNGUS DISEASES.

Sulphate of Copper (Bluestone) ..... 4 pounds.
Fresh Lime ..... 4 pounds.
Water ..... 50 gallons.

Place 25 gallons of water in a barrel, hang four pounds of bluestone in the water, enclosed in a piece of gunny sack; slack four pounds of lime carefully, then add enough water to make 25 gallons. Run the lime milk through a fine wire strainer, then mix with copper sulphate solution. Spray before the buds open, before the blossoms open, and again after the blossoms have fallen.

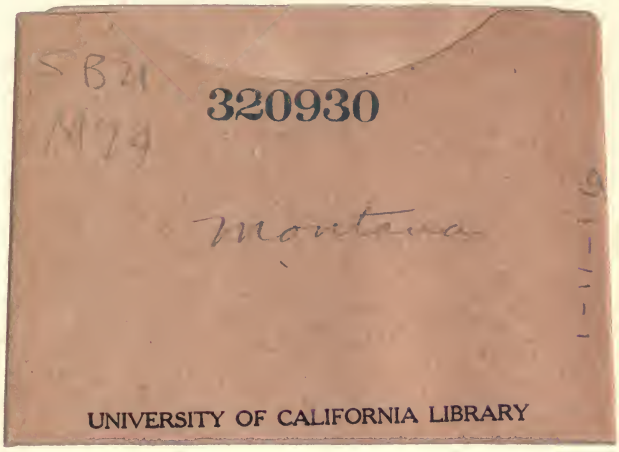
HELLEBORE FOR PEAR AND CHERRY SLUGS, GOOSEBERRY AND CURRANT WORMS.

The hellebore may be dusted on dry with a blowing machine, or if preferred steep one ounce of hellebore in a gallon of water, and use as a spray.

PARIS GREEN FOR CODLIN MOTH, CATERPILLARS AND LEAF-EATING INSECTS.

Paris Green ..... 4 ounces.
Water .....50 gallons.
Slacked Lime ..... 1 pound.

Strain the lime after slacking as in making the Bordeaux mixture. Dissolve the Paris Green as well as possible; mix and apply as a spray.

Paris Green is often badly adulterated. Be careful to secure it of reliable parties who will guarantee its quality.

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